4.0 RESULTS

The Phase I archaeological survey fieldwork consisted of the pedestrian reconnaissance of the SWM Areas 1, 2, 3, & 4 APE, as well as the excavation of STPs. Due to gravels and vegetation, less than 30 percent of the ground surface was visible. Remains associated with the structures once present in the APE were mapped and photographed during the pedestrian reconnaissance.

4.1 Test Area A

Test Area A is located immediately east of Old Mill Bridge Road and north of S.R. 54, and is comprised of the proposed locations of SWM Areas 1 and 2. Test Area A is irregular in shape and approximately 1.07 ha (2.64 ac) in size. Of this acreage, approximately 0.21 ha (0.51 ac) are disturbed or paved. At the time of the archaeological survey, portions of the test area were wooded with moderate undergrowth, old cornfield, and/or short grasses (Photographs 1, 2, and 3). A dirt/grass lane parallels S.R. 54 from Old Mill Bridge Road eastward into the interior of the test area where the house once stood. It most likely served as a secondary driveway. In the eastern portion of Test Area A where the house once stood, several gravel and/or dirt lanes, as well as two outbuildings, remnants of a fence line, a drainage ditch, a brush pile, and three dump areas, are present (Photographs 4, 5, 6, 7, 8, and 9). What appears to have served as the primary gravel driveway to the house is west of where the house stood and perpendicular to S.R. 54. It leads to an area between the two remaining outbuildings. The three dump areas located to the rear of the house location surrounding one of the remaining outbuildings were viewed, mapped, and photographed. Materials in the dump areas included wood lattice and decking from a pool, car and appliance parts and several trash bags with unknown contents. No materials were collected from these dump areas. These features appear to be recent and are most likely the result of some intermittent dumping of large items during the occupation of the house and clearing during the razing of the house (CRS # S-10028), which once stood on the property. Based on the mid-twentieth century age of the house, dumps or sheet middens used for everyday garbage disposal would not be expected. Buried and above-ground utilities are also present in Test Area A (Photographs 10 and 11). Ground surface visibility was less than 30 percent over most of the test area.

Test Area A was surveyed using both pedestrian reconnaissance and subsurface testing. The subsurface testing included the emplacement and excavation of 63 STPs and retest STPs. Three soil profiles occur in the STPs excavated in Test Area A. The first soil profile (e.g., STP N642

Photograph 1. View of the wooded portion of Test Area A, facing east.

Photograph 2. View of the old corn field portion of Test Area A, facing north.

Photograph 3. View of the short grassy portion of Test Area A, facing east.

Photograph 4. View of outbuilding #1 in Test Area A, facing northwest.

Photograph 5. View of outbuilding #2 in Test Area A, facing northeast.

Photograph 6. View of former house (CRS# S-10028) location in Test Area A, facing north. Note ground disturbance.

Photograph 7. View of dump area #1 in Test Area A, facing northeast.

Photograph 8. View of dump area #2 in Test Area A, facing north.

Photograph 9. View of dump area #3 in Test Area A, facing south.

Photograph 10. View of utility disturbance in Test Area A near corner of Old Mill Bridge Road and S.R. 54, facing south.

Photograph 11. View of untility trench disturbance in STP N615 E405 in Test Area A, facing east.

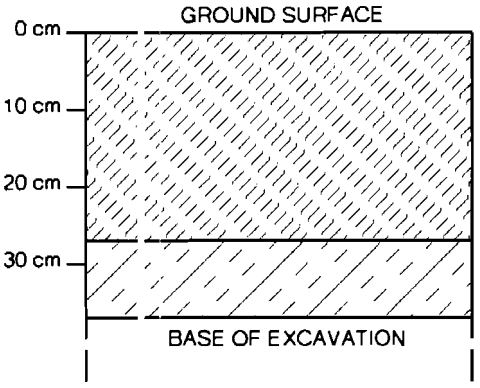
E435) is an example of a well drained and well developed soil profile of sandy loam coastal plain sediments (Figure 8; Appendix B). This soil profile is the most prolific in the test area and is typical of the stable and deeply weathered fluviomarine sediments occurring within this portion of the county.

The second soil profile (e.g., STP N615 E330) occurs in the southwest portion of Test Area A and is an example of a typical poorly drained coastal plain sediment with a frequently high water table found in this portion of the county (Figure 8: Appendix B). The subsoil immediately below the surface horizon in this soil profile is gleyed, indicating that saturation within the upper subsoil is frequent and prolonged. Gleyed conditions, noted by predominantly gray soil colors often with mottling, develop from reduced and anaerobic conditions brought about by saturation. The surface layer of STP N615 E330 is a 27-cm (11-in) thick layer of yellowish brown gravelly sandy loam (noted as Fill 1), most likely graded over the area after excavation of an adjacent drainage ditch. The intact original profile was found immediately underlying the layer of fill. The fill in this soil profile represents redeposited sediments.

The third soil profile found in Test Area A is also an example of a typical poorly drained coastal plain sediment with a frequently high water table (Figure 9: Appendix B). The subsoil immediately below the surface horizon is gleyed, indicating that saturation within the upper subsoil is frequent and prolonged. Gleyed conditions, noted by predominantly gray soil colors often with mottling, develop from reduced and anaerobic conditions brought about by saturation. A 23-cm (9-in) thick layer of 10YR 5/4 yellowish brown sandy loam fill (noted as Fill 2) was found overlying the intact natural profile of STP N630 E375. Fill 2 represents redeposited sediments.

No pre-contact period artifacts or cultural features were identified in Test Area A during the Phase I archaeological survey; however, historic period artifacts were recovered from the Ap horizon as well as Fill 1 and Fill 2. Of the 63 STPs excavated in Test Area A, 10 yielded historic period artifacts. The historic period artifacts recovered include 37 pieces of metal, 31 pieces of glass, three pieces of brick, one piece of coal, one piece of shell, and one piece of plastic (Appendix A). The majority of the recovered historic period artifacts are small, fragmentary, and not functionally or temporally diagnostic. The metal specimens include one General Motors (GM) car key; one small circular disk, possibly a button; one rectangular plate; 25 wire nails or wire nail fragments, and nine pieces of unidentifiable metal. All of the metal specimens are heavily oxidized, and some of the nails are bent. Identified nail sizes (penny) range from 4d to 10d. The metal specimens are not temporally diagnostic to a specific period. The glass specimens include four brown container fragments, three colorless bottle base fragments, 16 colorless container fragments, two green container fragment, two colorless frosted container fragments, one light green container fragments,

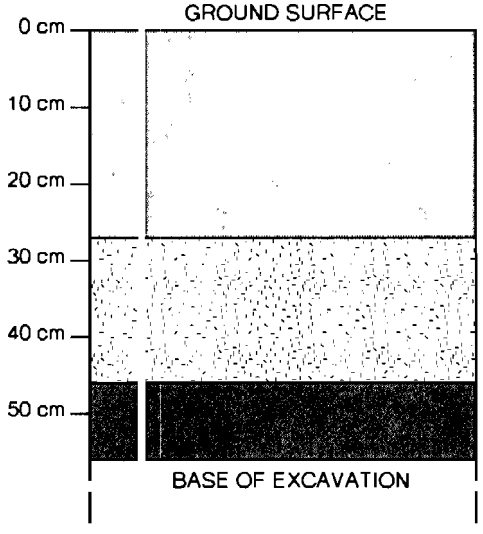
SOIL PROFILE
SHOVEL TEST PIT N642 E435



Ap 10YR 4/2 dark grayish brown sandy loam

Bt 10YR 6/8 brownish yellow sandy clay loam

SOIL PROFILE
SHOVEL TEST PIT N615 E330



Fill 1 10YR 5/4 yellowish brown sandy loam, with 35% fine gravels

Ap 10YR 3/2 very dark grayish brown sandy loam

Bg 10YR 7/1 light gray sandy loam, with common 10YR 7/8 yellow and 10YR 8/1 white mottles

DELAWARE DEPARTMENT OF TRANSPORTATION

S.R. 54 IMPROVEMENTS
SOUND CHURCH ROAD TO KEENWICK ROAD
BALTIMORE HUNDRED
SUSSEX COUNTY

SOIL PROFILES SHOVEL TEST PITS N642 E435 AND N615 E330

FIGURE - 8

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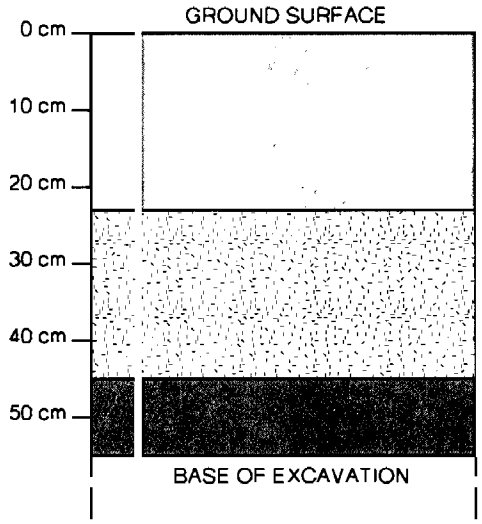
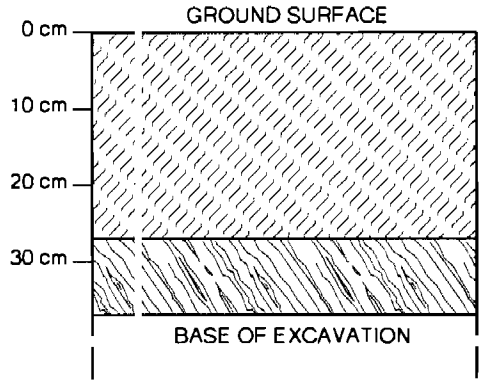
SOIL PROFILE
SHOVEL TEST PIT N630 E375



Fill 2	10YR 5/4 yellowish brown sandy loam, with thin lens of sand (fill)
Ap	10YR 3/2 very dark grayish brown sandy loam
Bg	10YR 7/1 light gray sandy loam, with common 10YR 7/8 yellow and 10YR 8/1 white mottles

SOIL PROFILE
SHOVEL TEST PIT N540 E315



Ap	10YR 4/1 dark gray sandy loam
Bg	10YR 5/1 gray sandy loam

DELAWARE DEPARTMENT OF TRANSPORTATION

S.R. 54 IMPROVEMENTS
SOUND CHURCH ROAD TO KEENWICK ROAD
BALTIMORE HUNDRED
SUSSEX COUNTY

SOIL PROFILES SHOVEL TEST PITS N630 E375 AND N540 E315

FIGURE - 9

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and three flat glass fragments. With the exception of one of the bottle base fragments, none of the glass specimens are temporally diagnostic to a specific period. The marked bottle base fragment is an example of an Owens-Illinois Glass Company bottle, which was manufactured between 1940 and 1960. Like the rest of the recovered historic period artifacts, the brick, coal, shell, and plastic are fragmentary and not temporally diagnostic with regard to a specific period. Despite not being able to clearly date most of the artifacts in the assemblage, all most likely relate to the construction, use, and/or razing of the house (CRS# S-10028), which once stood on the property. The house was constructed in 1955 and razed sometime after 2006, and the artifacts are in keeping with suburban domestic uses of that time period.

4.2 Test Area B

Test Area B is located immediately south of the intersection of Old Mill Bridge Road with S.R. 54, and is comprised of the proposed locations of SWM Areas 3 and 4. Test Area B is rectangular in shape and approximately 0.19 ha (0.47 ac) in size. Within Test Area B, approximately 0.06 ha (0.14 ac) are disturbed or paved. At the time of the archaeological survey, most of the test area was covered by scrub vegetation, with sporadic trees and gravel (Photographs 12 and 13). Test Area B is surrounded by commercial development, and a large drainage ditch and a gravel lane (most likely the driveway to the house which once stood on the property) are present along the western portion of the test area (Photographs 14 and 15). A large gravel patch, most likely associated with the house that once stood on the property, is located in the southwest corner of the test area. Unlike Test Area A, there are no standing structures or dump areas present in Test Area B. Buried and above-ground utilities and erosion control fencing are present in Test Area B (Photographs 16 and 17). Ground visibility was less than 30 percent over most of the test area.

Test Area B was surveyed using both pedestrian reconnaissance and subsurface testing. Due to the size of the test area, and the presence of the gravel driveway and former house site, the subsurface testing included the emplacement and excavation of five STPs. No retest STPs were necessary since no artifacts were recovered. A single soil profile occurs in the STPs excavated in Test Area B. The soil profile is typical of coastal plain soils found within this portion of the county and is poorly drained with a frequently high water table (see Figure 9: Appendix B). The subsoil immediately below the surface horizon within this profile is gleyed, indicating that saturation within the upper subsoil is frequent and prolonged. Gleyed conditions, noted by predominantly gray soil colors often with mottling, develop from reduced and anaerobic conditions brought about by saturation. No fill layer was found over the surface of any of the STPs excavated in Test Area B.

Photograph 12. View of scrub vegetation covering Test Area B, facing south.

Photograph 13. View of scrub vegetation and gravel covering Test Area B, facing north.

Photograph 14. View of large drainage ditch, sediment fencing, and commercial disturbance to Test Area B, facing south.

Photograph 15. View of utility and commercial disturbance in Test Area B, facing southwest.

Photograph 16. View of utility disturbance in Test Area B, facing southeast.

Photograph 17. View of utility disturbance in Test Area B, facing southwest.

No pre-contact or historic period artifacts or cultural features were identified in Test Area B during the Phase I archaeological survey. The lack of pre-contact period archaeological remains may reflect the sparse use of the area or a lack of preservation due to intensive historic and modern period land uses. The lack of historic period archaeological remains may reflect the intentional razing of the house (CRS# S-10123) and clearing of the property in *ca.* 2003 and/or the more modern period disturbances to the property by increased utilities and commercial construction in and adjacent to the test area prior to the archaeological survey.